

AMENDMENTS TO THE CLAIMS:

Amendments to the claims are reflected in the following listing of the claims. This listing of the claims will replace all prior versions, and listings, of the claims in the application if the amendment is entered.

1-49. (Cancelled)

50. (New) A device for monitoring plasma, comprising:
at least one layer of polymer directly exposable to said plasma, having incorporated therein

- a) an indicator capable of undergoing at least one color change;
- b) an activator for said indicator wherein said activator, when contacted with said oxidizing plasma, undergoes a reaction wherein the product of said reaction causes said indicator to undergo said color change; and
- c) a zinc compound or a polyaziridine to control the diffusion of plasma gasses.

51. (New) A device for monitoring a sterilization process that uses plasma as a sterilant; said device comprising:

an ink formulation including an ink extender, an indicator capable of undergoing a color change, and an activator for said indicator;

wherein said activator reacts with said plasma to produce a reaction product; and

wherein said reaction product causes the indicator to undergo the color change.

52. (New) The device according to Claim 51, wherein the indicator comprises at least one of a pigment, a dye, and a precursor of a dye.

53. (New) The device according to Claim 51, wherein the indicator comprises at least one of phenol red, m-cresol purple, and pararosaniline.
54. (New) The device according to Claim 51, wherein the ink formulation comprises an emulsion.
55. (New) The device according to Claim 51, wherein the ink extender comprises about 40% styrene-acrylic polymers.
56. (New) The device according to Claim 51, wherein the ink formulation further comprises a cross-linking agent.
57. (New) The device according to Claim 51, wherein the ink formulation further comprises a plasticizer.
58. (New) The device according to Claim 51, wherein the ink formulation comprises a flexo ink.
59. (New) The device according to Claim 51, wherein the ink formulation comprises a gravure ink.
60. (New) The device according to Claim 51, further comprising a substrate;
wherein the ink formulation is disposed on the substrate.
61. (New) The device according to Claim 51, wherein the substrate comprises a plastic film, a natural paper, a synthetic paper, or a metal foil.

62. (New) A method for monitoring the sterilization of an article with plasma as a sterilant, said method comprising:

providing said article;

providing an indicator device comprising an indicator capable of undergoing a color change and an activator for the indicator, wherein the activator reacts with said plasma to produce a reaction product capable of causing the indicator to undergo the color change;

associating the indicator device with said article;

simultaneously exposing said article and the indicator device to said plasma for a predetermined length of time; and

observing the indicator device to determine whether the color change has occurred.

63. (New) The method according to Claim 62, wherein said plasma comprises hydrogen peroxide plasma.